510(k) Summary

This summary of 510(k) safety and effectiveness information is submitted in accordance with the requirements of the Safe Medical Devices Act of 1990 and 21 C.F.R. \$807.92.

1. The submitter of this premarket notification is:

Egon Pfeil

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This summary was prepared on March 22, 2005.

2. The names of the devices are the Philips MP20, MP30, MP40, MP50, MP60, MP70, and MP90 IntelliVue Patient Monitor. Classification names are as follows:

Device Panel	Classification	ProCode	Description
Circulatory	\$870.1025, III	DSI	Detector and alarm, arrhythmia
System Devices	\$870.1025, III	MLD	Monitor, ST Segment with Alarm
(12625)	\$870.1025, III	MHX	Monitor, Physiological, Patient
(12625)	30,01202+,	[(with arrhythmia detection or
		1	alarms)
	\$870.1100, II	DSJ	Alarm, Blood Pressure
	\$870.1110, II	DSK	Computer, Blood Pressure
•	§870.1130, II	DXN	System, Measurement, Blood-
	30,0.2200, ==	1	Pressure, Non-Invasive
	§870.1435, II	DXG	Computer, Diagnostic, Pre-
	30,012104		Programmed, Single-Function
	\$870.1915, II	KRB	Probe, Thermodilution
	\$870.2060, II	DRQ	Amplifier and Signal
	3070.2000,	1	Conditioner, Transducer Signal
	\$870.2300, II	DRT	Monitor, Cardiac (incl.
	301012000,	1	Cardiotachometer & Rate Alarm)
	\$870.2340, II	DPS	Electrocardiograph
	\$870.2340, II	MLC	Monitor, ST Segment
	\$870.2350, II	DRW	Electrocardiograph, Lead
	30,000		Switching Adapter
	\$870.2370, II	KRC	Tester, Electrode, Surface,
	,		Electrocardiograph
	\$870.2450, II	DXJ	Display, Cathode-Ray Tube,
	go.o.		Medical
	§870.2600, I	DRJ	System, Signal Isolation
	\$870.2700, II	DQA	Oximeter
	\$870.2770, II	DSB	Plethysmograph, Impedance
	\$870.2800, II	DSH	Recorder, Magnetic tape,
	,		Medical
	§870.2810, I	DSF	Recorder, Paper Chart
	§870.2850, II	DRS	Extravascular Blood Pressure
	,		Transducer
	§870.2900, I	DSA	Cable, Transducer and
		1	Electrode, incl. Patient
		ł	Connector

		MOV	System, Network and
	=	MSX	Communication, Physiological
			Monitors
		0011	Analyzer, Gas, Carbon Dioxide,
Anesthesiology and Respiratory Therapy (12624)	\$868.1400, II	CCK	Gaseous-Phase
			Analyzer, Gas, Enflurane,
	§868.1500, II	CBQ	Gaseous-Phase (Anesthetic
			Concentration)
			Analyzer, Gas, Desflurane,
	\$868.1500, II	ИНО	Gaseous-Phase (Anesthetic
			Concentration) Analyzer, Gas, Sevoflurane,
	§868.1500, II	NHP	Gaseous-Phase (Anesthetic
			Concentration) Analyzer, Gas, Isoflurane,
	§868.1500, II	NHQ	Analyzer, Gas, Isoliurane,
			Gaseous-Phase (Anesthetic
			Concentration)
	\$868.1620, II	CBS	Analyzer, Gas, Halothane, Gaseous-Phase (Anesthetic
			Concentration) Analyzer, Gas, Nitrous Oxide,
	\$868.1700, II	CBR	Gaseous-Phase (Anesthetic
			Concentration)
			Analyzer, Gas, Oxygen, Gaseous-
	\$868.1720, II	CCL	
			Phase Monitor, Breathing Frequency
	§868.2375, II	BZQ	Monitor, Carbon Dioxide,
	\$868.2480, II	PKD	- I
			Cutaneous Cutaneous for
	\$868.2500, II	KLK	Monitor, Oxygen, Cutaneous, for Infant not under Gas Anesthesia
General Hospital	\$880.2910, II	FLL	Thermometer, Electronic,
and Personal Use			Clinical
(12520)			The state of the loggest has been seen as a second
Neurological	\$882.1400, II	GWR	Electroencephalograph
(12513)	§882.1420, I	GWS	Analyzer, Spectrum,
1			Electroencephalogram Signal

- 3. The modified devices are substantially equivalent to previously cleared Philips devices marketed pursuant to K992273, K014159, K021778, K032858, K040304, K040183, K040259, K040357, K041235, K041956, K042845, and K050141.
- 4. The modification is the introduction of Release C.00 software for the IntelliVue patient monitor devices, MP20, MP30, MP40, MP50, MP60, MP70, and MP90, and M3014A Capnography Extension interfacing the Philips Mainstream CO₂ Sensor model M2501A (K042601).
- 5. The modified devices have the same intended use as the legally marketed predicate devices. They are intended for the monitoring, recording, and alarming of multiple physiological parameters of adults, pediatrics, and neonates in hospital environment and during transport within hospital environments.
- 6. The modified devices have the same technological characteristics as the legally marketed predicate devices.

7. Verification, validation, and testing activities establish the performance, functionality, and reliability characteristics of the modified device with respect to the predicate. Testing involved system level tests, performance tests, and safety testing from hazard analysis. Pass/Fail criteria were based on the specifications cleared for the predicate device and test results showed substantial equivalence. The results demonstrate that the Philips IntelliVue Patient Monitor meets all reliability requirements and performance claims.



APR 2 2 2005

Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

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Senior Regulatory Affairs Engineer
Cardiac and Monitoring Systems
Philips Medizin Systeme Böblingen GmbH
Hewlett-Packard-Str. 2,
71034 Böblingen,
GERMANY

Re: K050762

Trade/Device Name: The Philips IntelliVue MP20, MP30, MP40, MP50, MP60,

MP70 and MP90 Patient Monitors, Release C.00

Regulation Number: 21 CFR 870.1025

Regulation Name: Arrhythmia Detector and Alarm (including ST-segment

Measurement and alarm)

Regulatory Class: II Product Code: MHX Dated: March 22, 2005 Received: March 24, 2005

Dear Mr. Pfeil:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

Ćhiu Lin, Ph.D.

Director

Division of Anesthesiology, General Hospital, Infection Control and Dental Devices

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Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number (if known):
Device Name: The Philips IntelliVue MP20, MP30, MP40, MP50, MP60, MP70 and MP90 Patient Monitors, Release C.00.
Indications for Use: Indicated for use by health care professionals whenever there is a need for monitoring the physiological parameters of patients. Intended for monitoring, recording and alarming of multiple physiological parameters of adults, pediatrics and neonates in hospital environments. The MP20, MP30, MP40 and MP50 are additionally intended for use in transport situations within hospital environments.
ST Segment monitoring is restricted to adult patients only.
The transcutaneous gas measurement $(\text{tcpO}_2/\text{tcpCO}_2)$ is restricted to neonatal patients only.
Prescription Use <u>yes</u> AND/OR Over-The-Counter Use <u>No</u> (Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C) (PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE OF NEEDED)
Concurrence of CDRH, Office of Device Evaluation (ODE)
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Division Sign-Off) Division of Anesthesiology, General Hospital, Infection Control, Dental Devices 510(k) Number: KOGO 162